

CLAIMS:

1. (canceled)
2. (new) A composition comprising microspheres, wherein said microspheres have a wall thickness of 100 to 500 nm, and a bulk density of no more than 0.1 g/cm³.
3. (new) The composition according to claim 2, wherein the mean geometric particle size of said microspheres is less than 20 μ m.
4. (new) A composition comprising microspheres, wherein said microspheres have a wall thickness of 43.5 to 261 nm, and a bulk density of no more than 0.1 g/cm³.
5. (new) The composition according to claim 2 wherein the walls of said microspheres comprise albumin.
6. (new) The composition according to claim 2 obtainable by spray-drying a wall-forming material in combination with a blowing agent.
7. (new) The composition according to claim 2 wherein said microspheres comprise a bioactive agent.

8. (new) The composition according to claim 7, wherein said microspheres comprise a protein or peptide.
9. (new) The composition according to claim 7, wherein said microspheres comprise an active agent selected from the group consisting of insulin, growth hormone and interferon.
10. (new) An inhaler comprising an inhalable formulation of microspheres wherein said microspheres have a wall thickness of 100 to 500 nm, and a bulk density of no more than 0.1 g/cm³ and wherein said microspheres comprise a bioactive agent.
11. (new) The inhaler according to claim 10, wherein the formulation comprises the microspheres as the sole or the predominant component thereof.
12. (new) A method for pulmonary administration of a bioactive agent wherein said method comprises the administration to the lungs of a composition which comprises microspheres having a wall thickness of 100 to 500 nm and a bulk density of no more than 0.1 g/cm³, wherein said microspheres further comprise a bioactive agent.
13. (new) The method according to claim 12, wherein the mean geometric diameter of said microspheres is less than 20 μ m.

14. (new) A method for pulmonary administration of a bioactive agent wherein said method comprises the administration to the lungs of a composition which comprises microspheres having a wall thickness of 43.5 to 261 nm and a bulk density of no more than 0.1 g/cm³, wherein said microspheres further comprise a bioactive agent.
15. (new) The method according to claim 12, wherein the walls of said microspheres comprise albumin.
16. (new) The method according to claim 12, wherein said microspheres are obtainable by spray-drying a wall-forming material, in combination with a blowing agent.
17. (new) The method according to claim 12, wherein said microspheres comprise a protein or peptide.
18. (new) The method according to claim 12, wherein said microspheres contain a bioactive agent selected from the group consisting of insulin, growth hormone and interferon.
19. (new) A method for diagnosis wherein said method comprises administering to a patient in need of such diagnosis, a composition which comprises microspheres having a wall thickness of 100 to 500 nm and a bulk density of no more than 0.1 g/cm³.

20. (new) The method according to claim 19, wherein the mean geometric diameter of said microspheres is less than 20 μm .
21. (new) A method for diagnosis wherein said method comprises administering to a patient in need of such diagnosis, a composition which comprises microspheres having a wall thickness of 43.5 to 261 nm and a bulk density of no more than 0.1 g/cm³.
22. (new) The method according to claim 19, wherein the walls of said microspheres comprise albumin.
23. (new) The method according to claim 19, wherein said microspheres are obtainable by spray-drying a wall-forming material, in combination with a blowing agent.
24. (new) A method for preparing microparticles, wherein said method comprises spray-drying wall-forming materials and wherein said method further comprises inclusion of a blowing agent in the feedstock for spray-drying.
25. (new) The method according to claim 24, wherein said blowing agent is selected from the group consisting of ammonium acetate, ammonium carbonate, and acids.
26. (new) The method according to claim 24, wherein said wall-forming material is albumin.